

Design Memorandum No. 01-2004

TO: Engineering Offices and Divisions
Districts
Consulting Engineers

FROM: Mark S. Gaydos, P.E. - Design Engineer

DATE: January 6, 2004

SUBJECT: SEDIMENTATION CONTROL

Design Manual Reference:

Chapter III

____ Revision

____ ° ____ Supplemental

Introduction

An Erosion and Sediment Control Handbook is being developed in accordance with the NDDOT's Small Municipal Separate Storm Sewer System (MS4) Permit application. The handbook is in draft form and expected to be adopted in early 2004. Until the handbook is formally accepted, this guidance will be used by designers to develop sedimentation control for all projects.

Implementation

This guidance is to be implemented immediately.

Guidance

Silt fences shall be placed to collect sediment before runoff leaves the right of way, before entering any water body or channel, before entering undisturbed right of way, before entering drainage devices (pipes and inlets) and in ditches that contain flowing runoff.

The following table will be used to determine silt fence spacings in ditches that contain flowing runoff.

Silt Fence Spacing	
Ditch Grade (percent)	Silt Fence Spacing (Feet)
1.0	200
2.0	100
3.0	65
4.0	50

Silt Fence Spacing	
5.0	40
>5.0	Do not use silt fence.

For slopes less than 1 percent and a flow velocity of 3 feet per second or less, silt fence is not needed. For slopes steeper than 5 percent, rock checks or an appropriate alternative should be used.

Materials & Research has written Supplemental Specification 708.07 Silt Fence for sedimentation control. As noted in the supplemental specification, '*Unless specified in the plans, silt fences will be supported with woven wire*'.

Two new pay items have been added to provide for supported and unsupported silt fences:

708 1322 Silt Fence Unsupported	LF	\$3.00
708 1325 Silt Fence Supported	LF	\$3.80

Pay Items Fence Backed Bales (LF or each) are available for your use, but should be used on a limited basis. Pay Item 708 1350 Sediment Control Fencing should not be used and will become inactive.

Questions

Any questions regarding the content or implementation of the memorandum should be referred to Ron Henke, Design Division, 701-328-4445.

Approval:

/S/
Francis G. Ziegler – Director of Project Development

1/7/04
Date